EXIDE TECHNOLOGIES

Global Leader in Stored Electrical Energy

December 14, 2016

Exide Technologies
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Vernon, CA 90058
Phone 323.262.1101
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VIA U.S. MAIL
COPY VIA ELECTRONIC MAIL

Air Permits Office (AIR-3)
Attn: Lornette Harvey
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105
R9AirPermits@epa.gov
Harvey.lornette@epa.gov

Re: *Request for Applicability Determination: Secondary Lead Smelting NESHAP; Exide Facility in Vernon, California*

Dear Ms. Harvey/Air Permits Office:

Exide Technologies ("Exide") hereby requests a determination from the United States Environmental Protection Agency ("US EPA") that the National Emissions Standards for Hazardous Air Pollutants From Secondary Lead Smelting, 40 CFR Part 63, Subpart X, Sections 63.541 through 63.552 ("Secondary Lead Smelting NESHAP") no longer apply to Exide's facility in Vernon, California ("Vernon Facility"). Exide permanently ceased Vernon Facility operations and is closing the Facility under regulations adopted by the California Department of Toxic Substances Control ("DTSC") and the South Coast Air Quality Management District ("SCAQMD").

Exide requests this NESHAP applicability determination because Exide is in the process of revising its Title V Permit with the SCAQMD and, for purposes of developing the Permit conditions, it is important for both Exide and the SCAQMD to know whether the Secondary Lead Smelting NESHAP applies. As further detailed in this letter, Exide believes that the Secondary Lead Smelting NESHAP no longer applies to the Vernon Facility for the following reasons:

- Exide Cannot Legally Operate the Vernon Facility: Exide has not operated any smelting equipment at the Vernon Facility since March 2014 and, pursuant to DTSC and SCAQMD regulations, Exide can legally never again operate the Vernon Facility.
    - DTSC Terminated Exide's Status: Exide provided regulatory notice of its intent to permanently close the facility in April 2015. Based on Exide's notice of closure, in May 2015 DTSC terminated Exide's Interim Status authorization, rendering the Facility legally unable to operate as a smelter.

- Exide Has Surrendered SCAQMD Permits: On July 24, 2015, Exide submitted an application to the SCAQMD to surrender all of its permits to operate the smelting equipment (*i.e.* the reverberatory furnace and blast furnace). By surrendering its permits, Exide cannot operate the Vernon Facility.

- Exide Cannot Physically Operate the Vernon Facility: Exide has removed all smelting process feed from the Vernon Facility, and has physically decommissioned its furnaces and associated equipment, rendering the Facility physically incapable of being a "secondary lead smelter" as defined by the Secondary Lead Smelting NESHAP. In analogous contexts, EPA has determined that NESHAP requirements do not apply to facilities that remove all process feed from their premises; EPA has also determined that NESHAP standards do not apply to facilities that are physically incapable of operating.

- Exide is Formally Closing the Non-Operating Vernon Facility: By law, Exide must submit, and DTSC must approve, a Closure Plan to remove hazardous wastes and regulated units from the Facility. On December 8, 2016, DTSC approved the Final Closure Plan, stating "DTSC is issuing today the Final Closure Plan and [Final EIR] for the non-operating Exide facility in Vernon." [See, Dec. 8, 2016 DTSC Press Release, *DTSC Releases the Final Exide Closure Plan and Final Environmental Impact Report* (emphasis supplied)].[1]

- Exide Will Not Re-Melt Lead in the Kettles: Earlier this year (before the Closure Plan was approved), SCAQMD (via Andrew Lee) and USEPA (via Lornette Harvey) engaged in an email dialogue wherein SCAQMD expressed the view that Exide may still be subject to the NESHAP because there remained a possibility that Exide would melt hardened lead in its kettles in order to remove the lead from the Facility. However, **re-melting of lead will not occur**. In the Final Closure Plan EIR adopted by DTSC, DTSC explicitly states that it "prohibits the use of re-firing the lead kettles." [*See*, Final Environmental Impact Report, Executive Summary, page ES-5]. With this issue resolved, there is no possibility that Exide will melt lead in its kettles, and therefore the NESHAP does not apply.

- The NESHAP Does Not Apply to Exide's Non-Operating, and Closing, Vernon Facility: By its plain language, the Secondary Lead Smelting NESHAP applies to facilities that are in present operation as secondary lead smelters (*i.e.* a facility that is engaged in smelting and recycling lead). While the NESHAP applies to facilities that temporarily shut down for maintenance, the NESHAP does not apply to permanently non-operational facilities that will never again smelt lead.

Based on the legal principles and factual matters set forth herein, Exide respectfully requests a determination that the Secondary Lead Smelting NESHAP does not apply to Exide's non-operating and closing Vernon Facility.

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[1] The Final Closure Plan, Final EIR, and all related notices and documents associated with the Closure Plan may be found at www.dtsc.ca.gov.

I. The Vernon Facility Does Not, and Can Not, Operate as a Secondary Lead Smelter

A. The Vernon Facility is Not a Secondary Lead Smelter Under the NESHAP

The Secondary Lead Smelting NESHAP covers entities that "own or operate any of the following affected sources at a secondary lead smelter: Blast, reverberatory, rotary, and electric furnaces; dryers; process fugitive emissions sources; buildings containing lead bearing materials; and fugitive dust sources." [40 CFR § 63.541(a)]. A "secondary lead smelter" is defined as "any facility at which lead-bearing scrap material, primarily, but not limited to, lead-acid batteries, is recycled into elemental lead or lead alloys by smelting." [40 CFR § 63.542]. Under the NESHAP, "Smelting means the chemical reduction of lead compounds to elemental lead or lead alloys through processing in high-temperature (greater than 980 Celsius) furnaces . . . ." [*Id*].

The NESHAP applies only to active processing facilities that are presently engaged in smelting lead. [40 CFR § 542 (a smelter is a facility that "is" recycling lead)]. While Exide still owns certain smelting equipment, it does not operate such equipment and is not a "secondary lead smelter" under the NESHAP because it has permanently ceased operations and is closing pursuant to an approved DTSC Closure Plan.

The Secondary Lead Smelting NESHAP accounts for itinerant maintenance and other temporary periods of non-operation -- defined as "shutdowns" and "start-ups" – during which the NESHAP still applies. The NESHAP defines a "shutdown" as "the *period* when no lead bearing materials are being fed to the furnace and smelting operations have ceased . . ." [40 CFR § 542]. A "startup" is "the *period* when no lead bearing materials have been fed to the furnace and smelting operations have not yet commenced . . . ." [*Id*]. By contrast, in this case there is no "period" of shutdown leading to a "period" of startup – the Vernon Facility is permanently shut down and will never again smelt or recycle lead.

B. The Vernon Facility is Not a Secondary Lead Smelter Under EPA NESHAP Applicability Determinations

EPA has determined that NESHAP standards do not apply if a facility has removed all process feed and is no longer capable of operating. In a matter involving Olin Corporation, EPA concluded that Olin was no longer subject to the NESHAP because Olin had removed all feed and storage tanks from its facility and could no longer operate:

> "Based on our review [], we have determined that [Olin] should no longer be considered subject to Subpart J [of the NESHAP] once they have eliminated any remaining inventory of benzene in their graining or incinerator system. The basis for this determination is that since Olin has removed all benzene feed and storage tanks at the plant, none of the associated equipment in the two units could be considered capable of operating in benzene service once the remaining inventory is processed."

[EPA NESHAP Determination re Olin Corp, Control Number ZN03, February 28, 1989].

Similarly, EPA determined in a separate context that if all machines subject to the NESHAP have been removed, then NESHAP requirements no longer apply. [EPA NESHAP Determination re Aerovox, Control Number Z060002, March 30, 2006 (Because the company had removed all regulated solvents, "EPA has determined that the Aerovox Division is no longer subject to [the NESHAP]").

C. The Vernon Facility Cannot Legally Operate as a Secondary Lead Smelter

On April 7, 2015, Exide formally notified DTSC "of its intent to permanently close the Facility located at 2700 and 2717 South Indiana Street, Vernon, CA 90058." [Exhibit A, April 7, 2015 Letter to DTSC]. In response, in May 2015 DTSC terminated Exide's Interim Status authorization for the Vernon Facility, rendering the Facility unable to legally operate as a smelter. [Exhibit B, DTSC May 7, 2015 Letter]. Shortly thereafter, on July 24, 2015, Exide submitted an application to SCAQMD to surrender all permits to operate smelting equipment, such as the reverberatory and blast furnace – Exide therefore cannot legally operate any smelting equipment.

Exide's formal closure notice triggered a regulatory-defined closure process under California law. Exide has worked with DTSC to develop and finalize a Closure Plan, which includes public comment and review under the California Environmental Quality Act. On December 8, 2016, DTSC approved the Final Closure Plan. [*See*, Final Closure Plan, Executive Summary (relevant pages), page 1, Exhibit E, ("Exide is now proceeding with facility closure"]. Exide is required to "permanently close the facility and implement the DTSC-approved Closure Plan, which would include dismantling operations." [*See*, Final Environmental Impact Report, Executive Summary (relevant pages), page ES-3, Exhibit D].[2]

In sum, Exide has formally notified all relevant agencies that it has permanently ceased operations, Exide has surrendered its operating permits and/or had its permits terminated by SCAQMD and DTSC, and DTSC has approved a Final Closure Plan requiring Exide to "permanently close." As such, Exide is legally incapable of operating the Vernon Facility as a secondary lead smelter, and the NESHAP does not apply.

D. Exide Cannot Physically Operate as a Smelter

Pending approval of the Final Closure Plan (now approved), Exide acted to ensure that the Vernon Facility was physically unable to smelt lead. First, with DTSC's permission, Exide removed all process feed, consisting of broken batteries and other lead-bearing material, from its reverb and blast furnace feed rooms. Exide shipped the last of its

[2] Closure will be conducted under strict regulatory oversight, and pursuant to a Compliance Plan designed to minimize fugitive emissions. Exide "will continue to maintain negative pressure while decontaminating units and equipment, dismantling equipment [and conducting other closure activities] . . . the air handling equipment at the existing Total Enclosures will maintain a negative pressure of at least 0.02 mm of Hg (0.11 inches of H_2O)." [Exide Engineering Controls Plan, Section 3.3.1].

reverb furnace feed offsite in April 2015, and Exide shipped all remaining blast feed by September 2015. For at least the past 15 months Exide has had no feed for its furnaces.

Second, Exide permanently disabled the two furnaces and the associated equipment that supplied lead used for the smelting process, as shown on the photos attached [Exhibit C, July 21, 2015 Photographs of Disabled Furnaces]. The blast and reverb furnaces are incapable of operating:

- The blast furnace jackets, which were used as part construction of the furnace shaft, were removed.
- The crucible, where the molten lead was held, was disconnected.
- The air supply piping was permanently severed.
- The oxygen supply tank, critical for operations, was removed and shipped from the site.
- The water cooling piping was disconnected.
- The reverberatory furnace gas burners were physically removed -- as a result no lead can be molten in the furnace.
- The screws that fed raw lead material into the furnace were extracted and removed.
- The stack venting both the blast furnace, and the reverberatory furnace, was capped. As a result no air flow can exit the furnaces.

In conclusion, by decommissioning and disconnecting the furnaces and associated equipment, the Vernon Facility is physically incapable of operating as a smelter. The Secondary Lead NESHAP is therefore inapplicable to the Vernon Facility.

E. Exide Will Not Re-Melt Lead in the Kettles

When Exide ceased Vernon Facility operations, a quantity of lead remained in several refining kettles. The lead hardened over time, and, as part of closure, Exide must remove the hardened lead. Exide initially proposed to heat and melt the lead in these kettles to allow the lead to be removed and shipped offsite. Based on this proposal, the SCAQMD opined that Exide may still be subject to the NESHAP because DTSC may allow Exide to re-melt the lead in the kettles. [*See*, 9/6/16 E-Mail from A. Lee at SCAQMD to L. Harvey at USEPA ("the facility is still under the requirements of the above mentioned NESHAP, Subpart X, so long as there is equipment available on the site")].

While there may have been a question about re-melting before, there is no question about it now. DTSC explicitly rejected re-melting as an option for lead removal. [*See* Exhibit D, page ES-5, wherein DTSC "prohibits the use of re-firing the lead kettles"]. Rather, DTSC has approved the mechanical removal of lead from the kettles as an

"environmentally superior alternative." [*Id.*] With re-melting no longer a possibility, it is clear that the NESHAP is inapplicable.

* * * *

For the foregoing reasons, Exide requests a determination that the Secondary Lead Smelting NESHAP no longer applies to the Vernon Facility. Thank you for your consideration.

Sincerely,

John Hogarth
Plant Manager, Vernon
Exide Technologies

Enclosure

cc:
Andrew Lee, SCAQMD
Laki Tisopulos, SCAQMD

Exhibit A

EXIDE

Global Leader
in Stored Electrical Energy

April 7, 2015

VIA CERTIFIED U.S. MAIL
COPY VIA ELECTRONIC MAIL

Exide Technologies
2700 S. Indiana Street
Vernon, CA 90058
Phone 323.262.1101
Fax 323.269.1906

Barbara Lee, Director
Department of Toxic Substances Control
1001 I Street, PO Box 806
Sacramento, CA 95812-0806

Rizgar Ghazi, P.E., Branch Chief
Office of Permitting
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200

Re: ***Exide Technologies (CAD 097854541) – Notice Under 2015 Amendment to the Stipulation and Order***

Dear Director Lee and Branch Chief Ghazi:

Pursuant to the 2015 Amendment to the Stipulation and Order ("2015 Amendment"). Exide Technologies (CAD 097854541) hereby provides Notice that it is withdrawing its Part B Permit Application under the California Hazardous Waste Control Law, Health & Safety Code § 25100 *et seq.*, and its implementing regulations, California Code of Regulations, title 22, section 66260.1, *et. seq.* Exide also provides Notice of its intent to permanently close the Facility located at 2700 and 2717 South Indiana Street, Vernon, CA 90058. [2015 Amendment, ¶ 4]. Exide will be submitting a revised Closure Plan by May 15, 2015.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Thomas Strang
Exide Technologies
Vice-President, Environment Health & Safety – Americas

cc: Leonard Grossberg, City of Vernon

Exhibit B

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Edmund G. Brown Jr.
Governor

May 7, 2015

Mr. Thomas Strang, V.P.
Exide Technologies
Environmental Health & Safety – Americas
Building 200
13000 Deerfield Parkway
Milton, Georgia 30004

TERMINATION OF INTERIM STATUS, EXIDE TECHNOLOGIES, VERNON, CALIFORNIA; ENVIRONMENTAL PROTECTION AGENCY ID. NO. CAD097854541

Dear Mr. Strang:

The Department of Toxic Substances Control (DTSC) has reviewed the letter dated April 7, 2015, from Exide Technologies (Exide) (Letter). The Letter provided notice that Exide is withdrawing its Part B Permit Application and provided notice of its intent to permanently close the facility located at 2700 and 2717 South Indiana Street in Vernon (Vernon facility). The Letter also acknowledges that a revised Closure Plan will be submitted by May 15, 2015.

California Health and Safety Code, section 25200.5(a) provides DTSC authorization to grant interim status to certain facilities "pending the review and decision of the department on the permit application. . ." Health and Safety Code section 25200.5(c) further provides that "interim status shall not be valid beyond the date of the decision of the department on the permit application." DTSC considers Exide's withdrawal of its Part B Permit Application to be the equivalent of a DTSC decision on the permit application because it terminates the application. There is no further action for DTSC to take on the application. Therefore, DTSC is providing notice to Exide in this letter that DTSC's grant of interim status to operate the Vernon facility as approved in the Interim Status Document (ISD) issued to Gould Inc. Metals Division effective December 18, 1981, including all subsequent modifications to the ISD, ended on April 7, 2015, the date of withdrawal of the permit application.

Notwithstanding the termination of interim status for the Vernon facility, Exide remains subject to applicable requirements under the Hazardous Waste Control Law and requirements for interim status, including, but not limited to closure and post-closure requirements. (See, e.g., Cal. Code Regs., tit. 22, § 66265.1, subd. (a), (b).) DTSC will continue to enforce all such requirements. DTSC acknowledges that it may be necessary to continue operation of certain existing hazardous waste activities at the

Vernon facility in order to prevent the release of hazardous waste or constituents or otherwise protect human health and the environment up until the time that a decision is made by DTSC on the revised Closure Plan. Any request submitted by Exide to DTSC for approval to undertake certain hazardous waste activity or operations prior to DTSC's decision on the revised Closure Plan must include a detailed explanation of: (1) the activity/operation to be undertaken; (2) why the activity/operations must be undertaken prior to DTSC's decision on the revised Closure Plan; and (3) why the activity/operation is necessary to protect human health and the environment.

If you have any questions regarding this letter you may call me at (916) 327-1194.

Sincerely,

Rizgar Ghazi, P.E.,
Division Chief
Hazardous Waste Management Program

cc: Sent Via Email

Exide Technologies, Inc.

Mr. Thomas Strang
Vice President - Environmental Health & Safety – Americas
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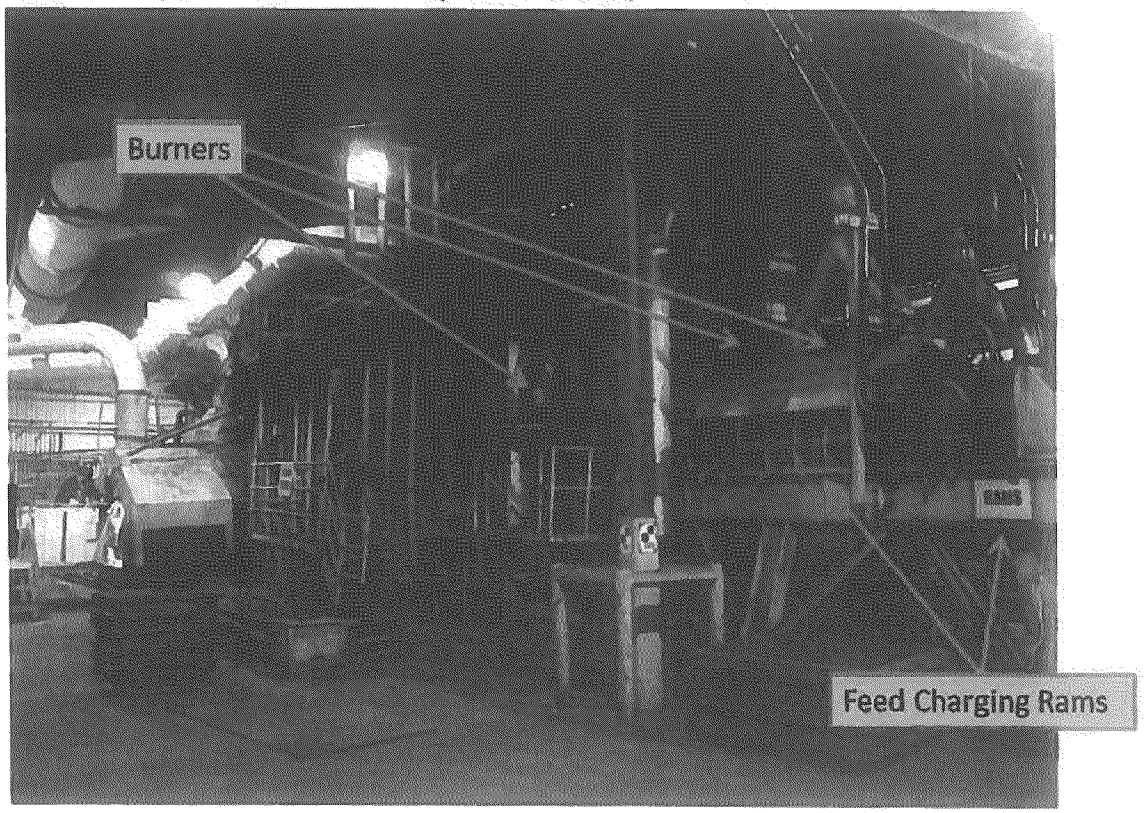
Ms. Christine Graessle
Assistant General Counsel
Christine.Graessle@exide.com

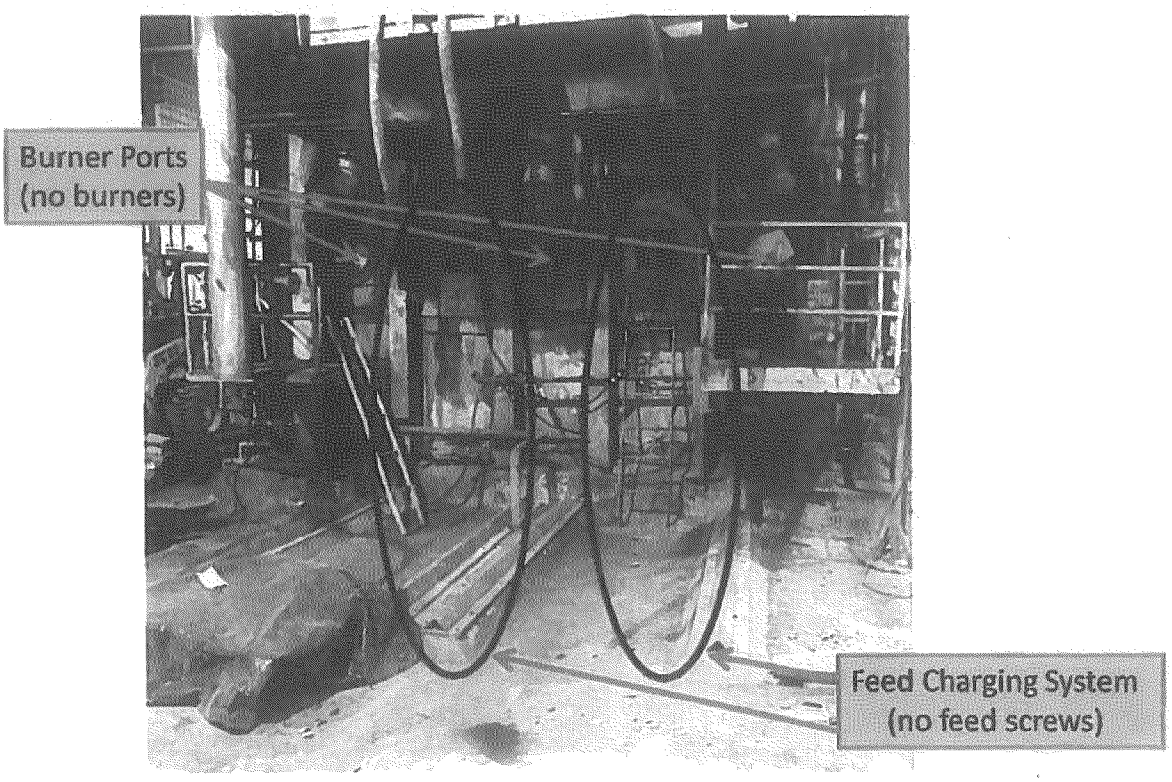
WL. rjb
WL01W.0515

Exhibit C

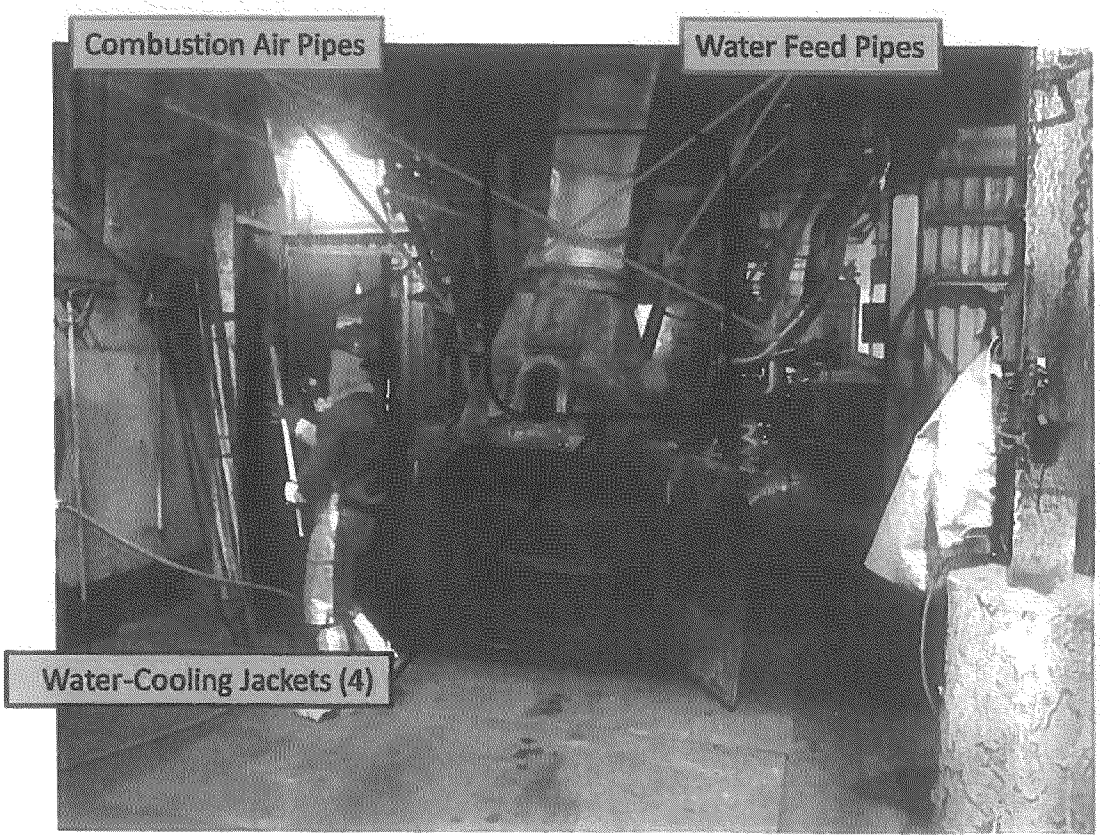
Reverb Furnace Charging Ram Feeders
(pre-March 2014)



Reverb Furnace Frontend Wall
(July 21, 2015)



Blast Furnace
(pre-March 2014)



Blast Furnace
(July 21, 2015)

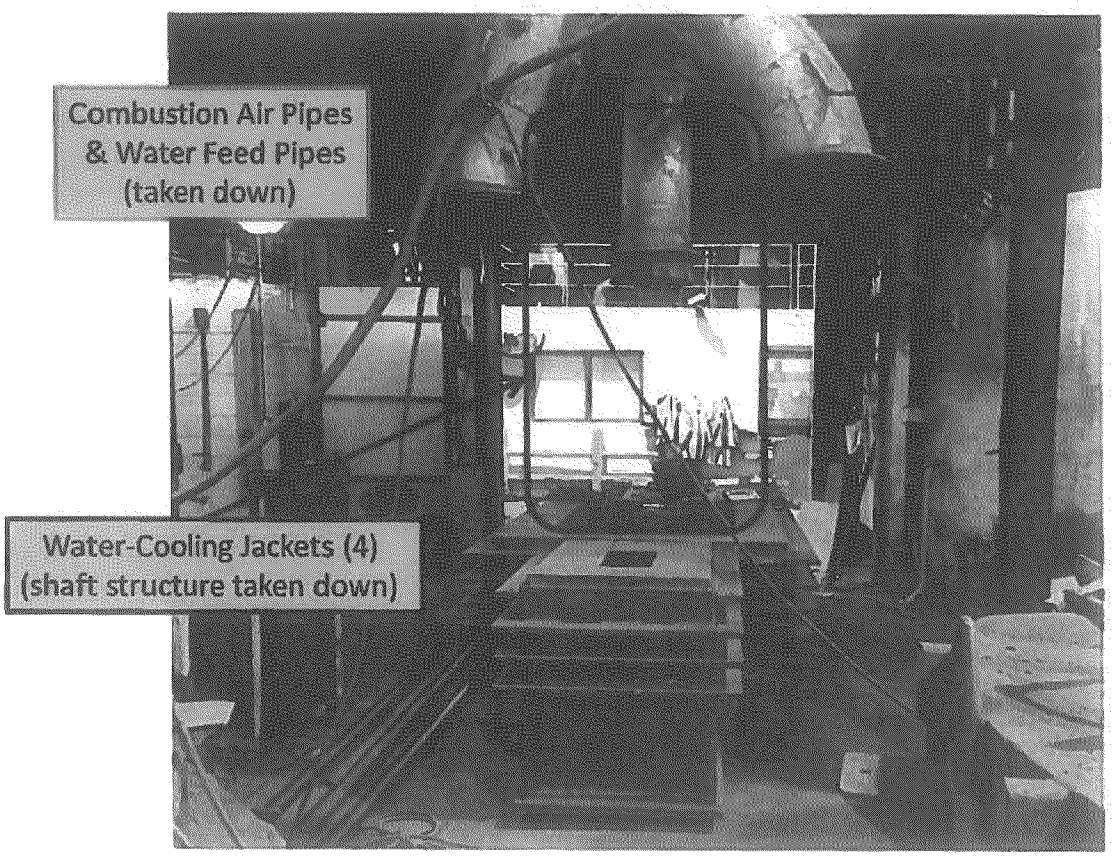


Exhibit D

EXECUTIVE SUMMARY

This Final Environmental Impact Report (FEIR) was prepared in compliance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, division 13, § 21000 et seq.) and CEQA Guidelines (Cal. Code of Regs., title 14, § 15000 et seq.) to assist the California Environmental Protection Agency's (CalEPA's) Department of Toxic Substances Control (DTSC) in considering the approval of a proposed Closure Plan of a hazardous waste treatment and storage facility owned and operated by Exide Technologies, Inc. (Exide), a secondary lead smelter (proposed Project). Exide requested DTSC's approval of a Closure Plan for the facility at 2700 South Indiana Street in Vernon, California (Exide facility), which was previously operating under Interim Status authorization under California Code of Regulations, title 22, section 66265 et seq.

Under the proposed Project, Exide would permanently close the facility and implement a DTSC-approved Closure Plan that would include dismantling operations and remediating contamination at the facility. The Closure Plan would outline a multi-year approach for removal and decontamination of contaminated equipment, structures, and soils at the site in three phases. The proposed Project assumes compliance with a number of regulatory actions aimed at reducing environmental hazards.

DTSC has principal responsibility for making a determination on the Closure Plan approval request and is the Lead Agency under CEQA for preparation and approval of the Environmental Impact Report (EIR). Under CEQA Guidelines Sections 15088 and 15132, an FEIR consists of the Draft Environmental Impact Report (DEIR), a list of commenters as well as the verbal and written comments received on the DEIR, responses to significant environmental points received on the DEIR, and any information added to the document or any changes made to the text of the DEIR in response to comments. The FEIR contains an updated description of the proposed Project in Chapter 1, a copy of responses to all comments received on the DEIR in Chapter 2, and all changes made to the DEIR in Chapter 3.

This FEIR will support the permitting process of all agencies whose discretionary approvals must be obtained for particular elements of this Project. The FEIR is intended to provide

decision-makers and the public with the most up-to-date information available regarding the Project, required mitigation measures, and Project alternatives.

Proposed Project

The Exide facility and adjacent areas are located in the City of Vernon's (City's) M-2 heavy industrial/warehousing zone and are surrounded by industrial land uses.

The Exide facility has been used for a variety of metal fabrication and metal recovery operations since 1922, with the primary use consisting of lead-battery recycling since the late 1970s. During operation, Exide received spent (used) lead-acid batteries and other lead-bearing materials and recycled them to recover lead and polypropylene. The sulfuric acid in batteries was recycled and used in the on-site wastewater treatment system, and the polypropylene was sent to an off-site facility for recycling. In recent years, the Exide facility's average production was 100,000 to 120,000 tons of lead per year. This amount is equivalent to recycling approximately 11 million automotive batteries, which is about the same number of spent batteries generated in California annually. Approximately 85% of the recycled lead was derived from used automobile batteries, whereas the remaining 15% came from other batteries and scrap lead.

In 2014, Exide submitted a revised permit application for a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit (Cal. Code Regs., title 22, article 2, § 66270.10 et seq.) to DTSC. At that time, Exide was implementing phased corrective action activities in accordance with a 2002 Corrective Action Consent Order with DTSC and operating under Interim Status authorization.

In March 2014, Exide ceased recycling operations at the facility to install new equipment to meet South Coast Air Quality Management District (SCAQMD) requirements under a Stipulated Order for Abatement, which included meeting SCAQMD rules on arsenic emissions. From March 2014 to May 2015, maintenance, housekeeping, and improvement activities occurred, but recycling operations did not occur.

Operations were expected to resume in spring 2015 in order to begin stack testing of new equipment installed to comply with SCAQMD rules. In March 2015, however, Exide was required to cease operations and permanently close its facility pursuant to a Stipulation and Order between DTSC and Exide (2015 Amendment) and a Non-prosecution Agreement reached with the Department of Justice. As ordered by the 2015 Amendment, Exide withdrew its permit application and notified DTSC of its intent to close the facility permanently by implementing a DTSC-approved Closure Plan.

Under the proposed Project, Exide would permanently close the facility and implement the DTSC-approved Closure Plan, which would include dismantling operations and cleanup of the facility. The Closure Plan outlines a multi-year approach for removal and decontamination of equipment, structures, and soils at the facility during three phases, as follows:

- **Phase 1** would include removal of all hazardous wastes from all hazardous waste units; decontamination and removal of all contaminated equipment, structures, and soils; and subsurface soil and soil gas sampling to characterize the contamination under the equipment and structures. As outlined in the DEIR, Phase 1 of the proposed Project includes Exide's proposal to re-fire the gas burners to melt a portion of lead remaining on site. Phase 1 activities are expected to require 34 months to complete.
- **Phase 2** is contingent on the results of soil and soil gas sampling in Phase 1 and would include additional subsurface sampling to characterize potential contamination under the equipment and structures. Phase 2 would include removal of contaminated soil beneath the former equipment, buildings, structures, and pavement as well as restoration activities.
- **Phase 3** would include post-closure and contingent post-closure work to implement long-term inspections, monitoring, and maintenance.

As discussed in the DEIR, construction planning has already occurred for Phase 1 and elements of Phase 2, and those elements were analyzed at a project level. Phases 2 and 3 include contingent work elements based on Phase 1's subsurface soil and soil gas sampling results. Therefore, this FEIR includes both project-specific and programmatic analyses for Phases 2 and 3 to support the closure process. Consistent with the requirements of CEQA

(Cal. Code Regs., title 14, §§ 15168(c), 15063(c)(3)(D)), DTSC will consider construction plans for Phases 2 and 3, when they are available, in light of this FEIR and determine whether additional environmental analysis is necessary.

Alternatives to the Proposed Project

CEQA Guidelines (Cal. Code Regs., title. 14, § 15126.6) require that an EIR consider a range of reasonable alternatives to the proposed Project, or to the location of the proposed Project, that would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project. Seven alternatives to the proposed Project (including the No Project Alternative) were developed based on comments received during public scoping, agency feedback on the proposed Closure Plan, and DTSC staff consideration. Through the alternatives analysis process presented in the DEIR, three alternatives were determined to meet most of the proposed Project objectives, to avoid or minimize the effects of the proposed Project, and to be potentially feasible, and these alternatives were carried forward for analysis in Chapter 6 of the DEIR. Because the proposed Project is legally mandated and site-specific, alternatives carried forward are limited to alternative construction designs that would achieve facility closure goals and objectives. In addition, while not legally feasible, the No Project Alternative was also carried forward for analysis in Chapter 6, consistent with the requirements of CEQA (Cal. Code Regs., title 14, § 15126.6(e)). The remaining three alternatives were considered and dismissed.

The following four alternatives were carried through the analysis of impacts in the DEIR:

- Alternative 1: No Project
- Alternative 2: Use of Rail to Transport Hazardous Construction Waste
- Alternative 3: Mechanical Removal of Lead from Kettles
- Alternative 4: Water Jet Cutting to Remove Lead from Kettles

The following alternatives were considered but eliminated from the analysis:

- Remediation but No Demolition of Buildings
- Isolated Transport of Hazardous Materials by Truck
- Use of Zero-emission Trucks

During the public comment period, a number of commenters requested that DTSC analyze additional methods of lead removal, in addition to Alternatives 3 and 4. Commenters suggested: 1) using larger cranes to remove intact kettles from the building, without first removing the lead from the kettles; and 2) using robots to mechanically remove the lead from kettles.

The use of robots to mechanically remove the lead from the kettles was deemed to be feasible, or at least potentially so. Use of larger cranes in conjunction with mechanical removal to reduce or avoid confined entry was also deemed to be feasible, or at least potentially so. Alternative 3 was accordingly modified in Chapter 3 of the FEIR to clarify that the use of robotic technology and larger cranes are consistent with this alternative.

After considering the proposed Closure Plan and comments received on the DEIR, DTSC determined that Alternative 3 is the preferred method of lead removal and will recommend its adoption to the decision-makers. Alternative 3 appears to be feasible and results in the least impacts and is thus the environmentally superior alternative. Consistent with that preference, the final Closure Plan, also recommended for approval, prohibits the use of re-firing the lead kettles and water jet cutting.

Final Closure Plan

Exide submitted its proposed Closure Plan to DTSC on May 15, 2015. DTSC issued a Notice of Deficiency on June 17, and Exide submitted a revised proposed Closure Plan on July 28, which is analyzed in the DEIR. DTSC reviewed the July 2015 proposed Closure Plan and, consistent with California Code of Regulations, title 22, section 66265.112(d)(5), requested further changes, which were included in the November 30 proposed Closure Plan. DTSC released the November 2015 proposed Closure Plan for public review on December 8, in conjunction with the DEIR.

The final Closure Plan, expected to be considered and approved by DTSC in late October or early November 2016, includes revisions to the November 2015 proposed Closure Plan based on comments received on the DEIR and November 2015 proposed Closure Plan. As noted elsewhere, the largest change between the proposed and final Closure Plan is that the final

Closure Plan would prohibit the use of re-firing the lead kettles. This change and all other changes were reviewed to determine whether any changes could impact the environmental analysis presented in the DEIR. Any changes that may affect the environmental analysis are presented in Chapter 3; no changes made to the Closure Plan trigger the need for further environmental review. The changes clarify ambiguities or further reduce environmental impacts. The final Closure Plan will be released to the public in conjunction with the FEIR. The final Closure Plan has not been approved by the decision-makers, and will be presented to the decision-makers along with the FEIR for consideration and potential approval.

Comments Received

The DEIR was released and distributed on December 8, 2015, for a 65-day review period. Approximately 25 copies of the DEIR were distributed to various government agencies, organizations, and repositories. In addition, DTSC sent more than 8,000 notices in both English and Spanish to surrounding communities to publicize the availability of the DEIR and provide information on the public hearing date and location.

The DEIR includes a full analysis and an Executive Summary that summarizes the proposed Project, alternatives, and findings. The Executive Summary was translated into Spanish. The DEIR is available online at DTSC's website and at seven publically accessible repositories. The Administrative Record is available at DTSC's Sacramento Regional office at 8800 Cal Center Drive, Sacramento, California, from 8:00 a.m. to 5:00 p.m. on Mondays through Fridays, excluding state holidays. All data submitted by Exide are available as part of the Administrative Record.

In January 2016, the 65-day review period was extended to March 28 for a total of 109 days. Notice of this change was given by direct mailing (more than 8,000 new notices were sent again in English and Spanish), email, and a posting on DTSC's website.

DTSC held a public hearing on February 3, 2016, at the City of Commerce, City Council Chambers, 2535 Commerce Way, Commerce, California. The meeting was conducted in English with simultaneous Spanish translation. DTSC staff began the hearing with an

overview of the proposed Closure Plan and DEIR organization and then opened the hearing to accept public comments on the proposed Project and environmental document.

DTSC received more than 900 individual comments on the DEIR from 14 agencies and organizations and 35 individuals. In addition, 11 individuals provided oral comments at the public hearing and 12 others provided comment cards to DTSC. All comments and responses to comments are presented in Chapter 2 of the FEIR.

Summary of Impacts and Mitigation Measures

A summary of impacts is provided as Table ES-1. Mitigation measures can be found following Table ES-1.

Exhibit E

CLOSURE PLAN

EXIDE TECHNOLOGIES
VERNON, CALIFORNIA
(EPA ID NO. CAD 097 854 541)

Prepared For:

EXIDE TECHNOLOGIES
Vernon, California

Prepared by:

ADVANCED GEOSERVICES
West Chester, Pennsylvania

Project No. 2013-2993-21
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Revised May 15, 2015
Revised July 28, 2015
Revised November 30, 2015

Modified by:

CALIFORNIA DEPARTMENT OF
TOXIC SUBSTANCES CONTROL

Final December 8, 2016

Date: December 2016

EXECUTIVE SUMMARY

BACKGROUND

Exide owns an inactive battery recycling facility situated at 2717 South Indiana Street in Vernon, California. The facility began operations in 1922. During the early 1980s, the facility was the subject of a major modernization and reconstruction that resulted in the current site configuration. The facility was granted Interim Status on December 12, 1981. The facility submitted its first Resource Conservation and Recovery Act (RCRA) hazardous waste permit ("Part B") application on November 8, 1988. Exide Technologies acquired the facility in September 2000 and last conducted recycling operations in March 2014. Exide withdrew its Part B application and provided notice of its intent to permanently close the facility on April 7, 2015. Exide is now proceeding with facility closure.

CLOSURE PLAN CONTENT

The Closure Plan addresses closure of former Interim Status (IS) hazardous waste management units (former IS units). Ninety-five (95) former IS units and their ancillary components at the facility will be closed. The former IS units include tanks, miscellaneous units, container storage areas, containment buildings, and a surface impoundment. The Closure Plan includes:

- Phase 1 (Closure): Phase 1 is a well-defined element that includes inventory removal; unit decontamination and removal; soil and soil gas sampling; and decontamination and deconstruction of buildings containing former IS units. Select units such as Surface Impoundment/Stormwater Pond, Pump Sump and Stormwater Management System; will remain operational through Phase 2 to manage and provide a location to clean closure-related vehicles exiting the Site.
- Phase 2 (Contingent Closure): Phase 2 addresses below grade impacts from former IS unit operations. The exact scope of Phase 2 is dependent on the sampling data generated during Phase 1 and may be influenced by data generated during the RFI and Corrective Action process. Phase 2 may include soil removal, restoration, capping, or some combination of measures. The Phase 2 activities described in this document (with five feet of soil removal beneath all former IS units) are assumed as a reasonable worst case scenario and have been developed in consultation with the Department of Toxic Substances Control (DTSC) to build the Contingent Closure cost estimate.

- Post-Closure: Occurs when hazardous soils have been remediated but remediation to residential standards (unrestricted clean closure) has not been achieved. If unrestricted clean closure is achieved, no post-closure care is necessary. Post-closure includes, but is not limited to, deed notices, inspections and reporting, maintaining a stabilized and secure site.
- Contingent Post-Closure: Occurs if closure performance standards (i.e., removal of hazardous waste) for IS units is not achieved. Contingent post-closure may include boundary markers, deed notices, inspections, maintenance, and monitoring (groundwater, soil pore-water, soil gas, and/or surface water sampling). The Contingent Post-Closure activities described in this document are assumed as a reasonable worst case scenario and have been developed in consultation with DTSC to build the Contingent Post-Closure cost estimate. The exact scope of Contingent Post-Closure will be dependent upon the nature and extent of contamination remaining in-place after Contingent Closure.

CLOSURE COMPARED TO CORRECTIVE ACTION

The Closure Plan addresses potential impacts from hazardous waste management units. The Closure Plan does not include other areas of the facility with impacts being addressed under Corrective Action as set forth in the Corrective Action Consent Order (CACO) Docket No. P3-01/02-010 (February 25, 2002). The Closure and Corrective Action (CA) processes are occurring concurrently, and in the future CA may influence Phase 2; however, Closure and CA are separate projects proceeding on separate paths with separate regulatory and technical requirements.

PHASE 1 CLOSURE ELEMENTS

Construction permits from and notifications to SCAQMD, Water Resources Control Board, Los Angeles County, City of Vernon, and Cal/OSHA will be completed as required prior to the start of regulated work.

Air Pollution Control Equipment - Exide will continue to operate air pollution control equipment as necessary to maintain negative pressure in the former North Yard manufacturing area (Total Enclosure Building) through de-skinning of the former buildings. Temporary enclosures with negative pressure will be utilized during closure of features outside the Total Enclosure Building. These measures, and others, are designed to reduce fugitive emissions and maintain compliance with applicable air quality standards during closure.

Inventory Removal - Hazardous material and waste ("inventory") stored/contained in the former IS units which is solid will be removed and sent off-site for disposal at a landfill or recycling at a secondary lead smelter. Liquid remaining within units will be sent off-site for disposal or treated in the on-site Wastewater Treatment Plant (WWTP). DTSC staff identified Alternative 3, mechanical removal of lead from kettles, as the preferred alternative. Alternative 3 was selected because it will result in the least amount of significant environmental impacts based on analysis presented in the Environmental Impact Report.

Unit Cleaning and Removal – All former IS tanks and miscellaneous units will be cleaned and removed by the completion of Phase 1, except for the Surface Impoundment/Stormwater Pond, Pump Sump and Stormwater Management System, and select sumps at topographic low points (maintained to collect stormwater runoff and excess water generated during the cleaning process) and the West Yard Truck Wash (maintained to clean vehicles before they leave the Site). The interior and exterior of units and ancillary equipment will be cleaned by HEPA vacuuming and/or pressure washing. Those former IS Units not removed during Phase 1 will be also cleaned at the end of Phase 1 to remove accumulated sediment, but will remain operational for Phase 2 (for environmental management purposes only). At the end of Phase 2, these units will be re-cleaned and removed.

Disposition of Removed Units and Components – Removed former IS units and ancillary components will be sent for re-use at another Exide facility, recycled (scrap metal), or disposed. Units and components destined for reuse at another Exide facility will be cleaned and sampled to demonstrate performance standards in Appendix BB are met. Units, equipment and scrap metal destined for recycling shall be sampled and proven to meet performance standards in Appendix BB. Units and ancillary components destined for disposal shall be cleaned to remove waste and waste residues, characterized for disposal purposes and sent to an appropriately permitted disposal facility.

Building Deconstruction - The areas and buildings containing former IS units and the Finished Lead Building will be decontaminated by HEPA vacuuming and pressure washing. The interior and exterior roof, walls (both sides) and floor will be decontaminated. Concrete floors will be removed. The Reverb Furnace Feed Room, Blast Furnace Feed Room, RMPS Building, Smelter Building, Baghouse Building, and Desulfurization Building will be gutted and deconstructed to up to five feet below grade dependent on sampling results generated during Phase 1. Concrete walls, non-metallic debris and equipment foundations will be characterized and disposed off-site. Metal debris will be sampled to confirm it meets the performance standards in Appendix BB and recycled.

Air Monitoring - Ambient air monitoring will be performed daily (24 hrs/day) during closure for lead and arsenic. Real-time particulate (dust) monitoring will be conducted during working hours downwind and potentially upwind of the work area to track and gauge the trends in particulate dust generation as work progresses. The Contractor performing the decontamination and deconstruction activities will be required to conduct monitoring of their personnel and establish appropriate levels of personal protective equipment which comply with Cal/OSHA standards.

Water Management - Stormwater within the facility will be collected in the stormwater management system (manholes, piping, sumps, trench drains, pumps, Surface Impoundment and curbing) during Phase 1 and 2. Depending on the timing of CA and receipt of all required permits and approvals for direct discharge of stormwater, it may also be necessary to continue to collect and treat stormwater after completion of Phase 2. Stormwater will be treated in the existing or temporary WWTP and discharged to the LA County Sanitation District until approval for direct discharge is received.

Wastewater generated during closure, including stormwater, will be treated in the on-site WWTP and discharged to the LA County Sanitation District. During the later portions of Phase 1 and Phase 2, a temporary WWTP will be used to treat wastewater prior to discharge as the existing WWTP will be closed.

PHASE 2 CLOSURE ELEMENTS

Phase 2 (Contingent Closure) Plan – The scope of Phase 2 is expected to involve the removal of underlying contaminated soil. Excavation of contaminated soil will be conducted dependent on sampling results generated during Phase 1. For cost estimating purposes, a Contingent Closure scenario has been developed which assumes that removal of floors and pavement will be required beneath all secondary containment areas, containment buildings, the Container Storage Area and Smelter Building units and that the removal depth will be 5 feet, dependent on the sampling results generated during Phase 1. The Phase 2 Closure also assumes that not all soils at or above hazardous levels can be removed with a 5-foot deep excavation and a RCRA cap will be required.

Using the results of the Phase 1 sampling, Exide will prepare a Phase 2 Contingent Closure Plan. The Phase 2 Contingent Closure Plan will identify the vertical and horizontal limits of removal, procedures for confirmatory sampling, erosion and sediment control measures, and Site restoration and stormwater management plan. The Phase 2 Contingent Closure Plan will be subject to DTSC, review and approval. If the Phase 2 Contingent Closure Plan includes closure with waste in-place, Exide will also be required to prepare and submit a post-closure permit application and assorted

supporting documents, including water quality monitoring plan and inspection and maintenance plan. None of the former IS units will remain on-site following Phase 2 closure.

SCHEDULE

Implementation of Phase 1 will begin within 30 days of approval of the Closure Plan. DTSC approval of the Closure Plan is required prior to implementation along with input from AQMD, Cal/OSHA and City of Vernon. The estimated timeframe for Phase 1 Closure activities is approximately 34 months.

Phase 2 implementation is expected to begin 6 to 12 weeks following completion of Phase 1 Closure, depending on DTSC requirements and approval of the Phase 2 Contingent Closure Plan. Phase 2 will be established after the scope of the required work is known, and it is expected that it will be on the order of 12 to 24 months.